To: CN=Maryjane Nearman/OU=R10/O=USEPA/C=US@EPA;CN=Brandon Perkins/OU=R10/O=USEPA/C=US@EPA;CN=Monica Tonel/OU=R10/O=USEPA/C=US@EPA;CN=Cara Steiner-Riley/OU=R10/O=USEPA/C=US@EPA[]; N=Brandon Perkins/OU=R10/O=USEPA/C=US@EPA;CN=Monica Tonel/OU=R10/O=USEPA/C=US@EPA;CN=Cara Steiner-Riley/OU=R10/O=USEPA/C=US@EPA[]; N=Monica Tonel/OU=R10/O=USEPA/C=US@EPA;CN=Cara Steiner-Riley/OU=R10/O=USEPA/C=US@EPA[]; N=Cara Steiner-Riley/OU=R10/O=USEPA/C=US@EPA[]
Cc: []
From: CN=Eva Chun/OU=R10/O=USEPA/C=US
Sent: Tue 1/22/2008 8:07:31 PM
Subject: Fw: Anchorage Daily News Story: Red Dog Mine pollutants stir controversy
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To report an environmental violation, visit EPA's website at
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Kimberly Ogle/R10/USEPA/US
01/22/2008 12:00 PM
To Eva Chun/R10/USEPA/US@EPA
cc
Subject Fw: Anchorage Daily News Story: Red Dog Mine pollutants stir controversy

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Anthony Brown/R10/USEPA/US
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cc
Subject Anchorage Daily News Story: Red Dog Mine pollutants stir controversy
RED DOG: Nearby villagers, others question effects on human health.

Red Dog Mine pollutants stir controversy
RED DOG: Nearby villagers, others question effects on human health.

By ELIZABETH BLUEMINK
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Scientists say dust-borne pollution from the world's largest zinc mine, located in Northwest Alaska, is harming some of the tundra's most sensitive plants -- mosses and lichens.

But they are having difficulty convincing some residents and environmentalists that pollutants from the Red Dog Mine do not pose a health risk to humans.

Scientists hired by the mine say the dust has hurt mosses and lichens, and perhaps ptarmigan. But, they say, the concentrations of toxic metals in the air, land and water are too low to pose health risks to people who consume wild foods in the region.

The company's report, published in late November, is a response to federal scientists' 2001 discovery of large amounts of heavy metals in soil and vegetation on federal land next to the mine's 52-mile haul road, which connects the mine to a Chukchi Sea port.

Last month, state officials approved the mine's report, but for various reasons -- ranging from technical complaints to allegations of bias -- some residents of nearby villages, environmental groups and the U.S. Environmental Protection Agency are questioning its human health finding.

"I don't want that dust in my body," said Enoch Adams, the vice mayor of Kivalina, a village on a barrier island north of the mine's port.

"We don't pick berries around there. I don't hunt caribou there," he said, referring to the land around the haul road and the port, which are closed to subsistence gathering.

Red Dog has reduced its dust emissions, but the state's approval of the report will trigger key decisions soon on how to address the heavy metals already on the tundra.

Should an expensive cleanup be launched? Should the tundra be left to recover naturally?

Those questions and others dealing with the mine's future operations will be debated this year, said Rich Sundet, a contaminated-sites manager for the Alaska Department of Environmental Conservation.

The timing is possibly significant.

Conclusions about Red Dog's effects on the environment are coming just as Alaskans are beginning to weigh the costs and benefits of developing other rich metallic deposits -- in particular, the massive Pebble copper and gold prospect and the Donlin gold prospect, both in remote stretches of Southwest Alaska.

A TOUCHY SUBJECT

Red Dog was an environmental battleground even before it opened in 1989.

And yet the mine is highly valued in the Northwest Arctic for its immense wealth and the hundreds of jobs it provides in the region, where jobs are scarce.

From 2000 through 2006, the mine produced an estimated $6 billion worth of zinc, lead and silver -- about 80 percent of the value of all mine output in Alaska. The mine's landlord, NANA Regional Corp., receives royalties from the mine, and under federal law the Kotzebue-based Native corporation shares its payments -- worth millions -- with other Native corporations across Alaska.

Some government regulators have applauded Teck's steps in recent years that reduced natural-occurring toxicity in nearby Red Dog Creek, allowing fish to colonize the stream.

But the mine has faced permitting troubles related to its land, air and water discharges, and it is being sued by some Kivalina residents over repeated violations of its federal water-discharge permit.

The mine's dust emerged as a serious problem in 2001, when the National Park Service released its study showing high levels of lead, zinc and cadmium in moss and soil along the 24-mile stretch of road that bisects the Cape Krusenstern National Monument.

Further testing showed large amounts of heavy metals had settled on vegetation near the mine and at the state-owned port, according to the mine's study.

THE FINDINGS

In some spots, damage to the tundra near Red Dog is visible to the naked eye.

Next to the Red Dog's road, for example, some lichens and mosses have vanished and other plants have moved in to replace them.

In other spots along the road, dust-coated vegetation is either dead or dying, according to the mine's study.
The mine's scientists said the amount of lead they discovered in ptarmigan residing next to the mine exceeds the amount considered safe for the bird's health.

But they concluded that caribou -- an important source of food for Noatak and Kivalina -- and other animals that migrate through the area are not ingesting harmful amounts of Red Dog's dust.

The scientists didn't test toxic metal levels in people who live near the mine, but they did evaluate the results published by state health officials, who periodically test village residents for heavy metals in their blood.

The most recent state tests, in Kivalina and Noatak in 2004, showed that for the 58 adults tested, their lead levels were roughly the same as the baseline lead level in adults nationwide.

THE REACTIONS

Though some villagers are wary of the mine's study, NANA officials said they were encouraged by the findings.

"NANA has always placed subsistence as the highest priority for our land use," said Rosie Barr, who works in the company's natural resources department.

She said NANA staff will visit villagers soon to discuss the report's findings and assure them that the food is safe to eat.
The mine's environmental critics said they don't trust science from the company that was responsible for the contamination and could be liable for cleaning it up.

"I'm concerned about inherent bias," said Pam Miller, executive director for the Alaska Community Action on Toxics, an Anchorage-based environmental group.

State officials believe the science is sound, however. The Department of Environmental Conservation, which regulates cleanups at industrial sites, studied and critiqued the company's draft findings over a two-year period before approving the final report.

The National Park Service hasn't weighed in on the mine's findings but it will publish its own study of lichens and moss near the haul road later this year, said Peter Neitlich, a Park Service ecologist based in Washington state.

In the future, the Park Service also wants to take a closer look at resident animals -- such as moose and musk ox -- for potential effects from heavy metals, he said.

Park Service scientists want to find out if the metals will become more of a threat over time due to the natural process of weathering. If weathering occurs, heavy metals -- lead, in particular -- could break down chemically into a form that could be more easily absorbed by animals from the surrounding environment, Neitlich said.

WHAT'S NEXT

The DEC isn't the only agency reviewing the mine's findings.

The EPA recently sent a letter to the state agency, saying it is worried about some technical flaws in the report's human health findings.

Environmental groups are weighing in, too.

Red Dog has worked hard to control its dust but it hasn't eradicated the problem yet, said Joan Frankevich, an Alaska program manager with the National Parks Conservation Association.

Her group will press regulators to disallow any expansion at Red Dog until Teck cleans up the tundra in the national monument, she said.

A few years from now, Teck wants to dig a new open pit next to its existing one, extending the mine's life until roughly 2031.

"It's not appropriate to contaminate a unit of the park system until the past contamination has been dealt with," Frankevich said, adding that the national environmental group opposes Teck's plan to expand Red Dog.

Red Dog officials said they deserve some credit for their efforts to eliminate dust in the past seven years.

The mine's dust emissions have dropped by 50 percent to 90 percent, depending on the operation, due to improvements such as tighter seals on the crushers that grind up the metals and the trucks that haul the concentrate every day to the port, company officials said.

"Hopefully, people recognize our efforts to constantly improve the (mine's) operation," Hall said.

He said company officials are brainstorming on how to deal with the risks they found in the study and plan to propose their ideas to state regulators within the next few months.

Find Elizabeth Bluemink online at adn.com/contact/ebluemink or call 257-4317.

Red Dog at a glance
Location: 82 miles northwest of Kotzebue, 46 miles inland from the Chukchi Sea
Length of operation: Since 1989
Type of mine: Open-pit zinc, lead and silver mine
Operator: British Columbia-based Teck Cominco Ltd.
Landowner: NANA Regional Corp.
Employees: 457
Production: More than 700,000 tons of zinc and lead concentrates, and 7.6 million ounces of silver in 2006
Profit: $951 million in 2006
Source: 2006 statistics from the Alaska Division of Geological and Geophysical Surveys and Teck Cominco's 2006 annual report

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